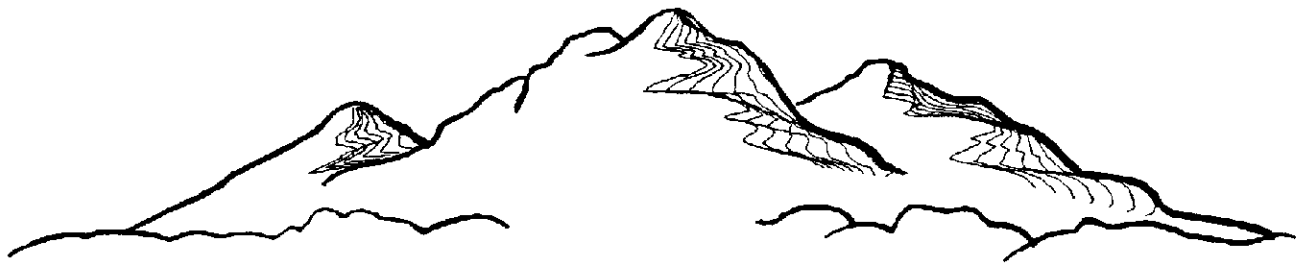


CERRO GRANDE PRESCRIBED FIRE

May 4-8, 2000



INVESTIGATION REPORT

May 18, 2000



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Fire Investigation Team

**National Interagency Fire Center
Boise, Idaho**

**U.S. Department of the Interior, National Park Service
U.S. Department of the Interior, Bureau of Land Management
U.S. Department of Agriculture, Forest Service
Department of Energy**

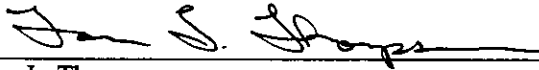
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CERRO GRANDE PRESCRIBED FIRE
FIRE INVESTIGATIVE TEAM
May 18, 2000



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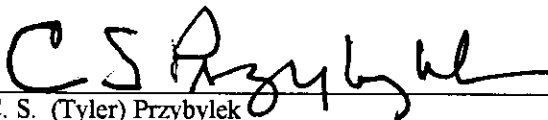
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CONTENTS

EXECUTIVE SUMMARY	1
INTRODUCTION	3
INVESTIGATION TEAM	4
Process	4
Scope of Investigation	5
Team Composition	5
NATIONAL PARK SERVICE FIRE MANAGEMENT	6
National Fire Program	6
NPS Management Policies.	6
Bandelier National Monument Fire Program	7
CERRO GRANDE PRESCRIBED FIRE	9
Planning	9
Implementation	10
<u>Thursday, May 4</u>	10
<u>Friday, May 5</u>	11
<u>Saturday, May 6</u>	12
<u>Sunday, May 7</u>	13
<u>Monday May 8</u>	13
FINDINGS AND RECOMMENDATIONS	14
Planning	14
Implementation	18
Qualifications	21
CONCLUSIONS	23
REFERENCES	25
APPENDIX	26
APPENDIX 1. LIST OF TEAM MEMBERS AND LIAISONS	27
APPENDIX 2. DELEGATION OF AUTHORITY FOR THE INTERAGENCY FIRE INVESTIGATION TEAM	29
APPENDIX 3. UPPER FRIJOLES UNITS 1 AND 5 PRESCRIBED FIRE PLAN	30
APPENDIX 4. CERRO GRANDE WILDLAND FIRE SITUATION ANALYSIS.	31
APPENDIX 5. STAFF ORGANIZATION CHARTS FOR BANDELIER NATIONAL MONUMENT	32
APPENDIX 6. VALIDATION OF PRESCRIPTION PARAMETERS FOR UPPER FRIJOLES UNITS 1 AND 5 PRESCRIBED FIRE	33
APPENDIX 7. SUMMARY OF WEATHER INFORMATION FOR CERRO GRANDE PRESCRIBED FIRE	34
APPENDIX 8. EVENTS LEADING UP TO THE ESCAPE OF THE UPPER FRIJOLES UNITS 1 AND 5 PRESCRIBED FIRE	35

EXECUTIVE SUMMARY

On May 4, 2000, in the late evening, fire personnel at Bandelier National Monument, National Park Service, ignited a prescribed fire with an approved plan. Firing and line control occurred during the early morning of May 5. Sporadic wind changes caused some spotting within the unit and a slopover on the upper east fireline. Because of the slopover the prescribed fire was declared a wildfire at 1300 hours on May 5. The fire was contained on May 6 and early on May 7; however, at approximately 1100 hours on May 7 winds increased significantly from the west and resulted in major fire activity and ultimately caused the fire to move out of control to the east on the Santa Fe National Forest. The fire was taken over by a Type 1 team on May 8.

In its most extreme state on May 10, the Cerro Grande Prescribed Fire was carried by very high winds, with embers blowing a mile or more across the fire lines to the north, south, and east, entering Los Alamos Canyon towards Los Alamos, New Mexico. The towns of Los Alamos and White Rock were in the fire's path and more than 18,000 residents were evacuated. By the end of the day on May 10, the fire had burned 18,000 acres, destroying 235 homes, and damaging many other structures. The fire also spread towards the Los Alamos National Laboratory, and although fires spotted onto the facility's lands, all major structures were secured and no releases of radiation occurred. The fire also burned other private lands and portions of San Ildefonso Pueblo and Santa Clara Pueblo. As of May 17 the fire was uncontrolled and approaching over 45,000 acres.

Secretary of the Interior Bruce Babbitt formed an interagency Fire Investigation Team on May 11 to examine events and circumstances from the beginning of planning the prescribed fire until the fire was turned over to a Type 1 Incident Management Team on May 8. Furthermore, Secretary Babbitt and Secretary of Agriculture Dan Glickman suspended all federal prescribed burning for 30 days, or longer, west of the 100th meridian.

The team based its findings and recommendations on interviews with key personnel and other people who witnessed the fire; documents associated with approval and implementation of the prescribed fire; on-site observations; and technical analyses of factors including weather, climate, and fire behavior.

The Fire Investigation Team concludes that federal personnel failed to properly plan and implement the Upper Frijoles Prescribed Fire, which became known as the Cerro Grande Prescribed Fire. Throughout the planning and implementation, critical mistakes were made. Government officials failed:

- To utilize the correct National Park Service complexity analysis process.
- To provide substantive review of the prescribed fire plan before it was approved.
- To evaluate conditions adjacent to the prescribed fire boundary with regards to fire behavior, fuel conditions, and public safety in the event the fire crossed the planning boundaries.
- To complete and document the onsite review of critical conditions identified in the prescribed fire plan prior to ignition.
- To provide adequate contingency resources to successfully suppress the fire.

- To provide any wind predictions in the 3-5 day forecast for the periods of May 7 to May 9.
- To follow safety policies for firefighters and the public.

The investigation team believes that the Federal Wildland Fire Policy is sound; however, the success of the policy depends upon strict adherence to the implementation actions throughout every agency and at every level for it to be effective.

The Cerro Grande Prescribed Fire Investigation Report will be provided to an Independent Review Board, which will review the team's findings and recommendations.

CERRO GRANDE PRESCRIBED FIRE INVESTIGATION REPORT

MAY 4-8, 2000

INTRODUCTION

Fire personnel at Bandelier National Monument, National Park Service (NPS) in New Mexico prepared a prescribed fire plan for the Upper Frijoles Units 1 and 5, now known as the Cerro Grande Prescribed Fire. The units encompassed approximately 1,000 acres in the headwaters of Frijoles creek above State Route 4 to the park boundary at Cerro Grande summit. This prescribed fire was part of the 10-year prescribed fire schedule approved in the fire management plan for Bandelier. The prescribed fire was scheduled for a three-phased treatment. Phase 1 consisted of burning grasslands in the upper part of the units. Phase 2 was the forested area on both the east and west side of the drainage, and Phase 3 was the central wetter area. (See Figures 1, 2, and 3)

In the late evening on May 4, 2000, the prescribed fire project was initiated. The intent was to back the fire down from the ridge and then extinguish the lower edge of the fire in the grass fuels. This would create a buffer of burned area between the park boundary and the areas to be included in Phases 1, 2, and 3. The ignition proceeded slowly and only when the ignition pattern changed did the spread and intensity increase. The fire burned through the control line (slopover) on the upper east side of the prescribed fire area during the late morning hours of May 5. Even with this slopover outside the prescribed fire area, the burn boss believed the prescribed fire remained within prescription. Fire personnel worked to suppress the slopover while continuing to hold the line around the remainder of the area they had ignited. They ordered additional resources in accordance with the contingency plan written in the prescribed fire plan. The contingency resources consisting of an additional crew and a helicopter were on the fire by late morning, but by early afternoon on May 5, the slopover continued to be a problem and the crew requested retardant to control it. This retardant request made the burn boss reconsider if the prescribed fire was still within prescription. It was not. The decision was made to declare the prescribed fire a wildland fire and initiate appropriate responses. A Type 3 incident command was established with existing personnel. On May 6, fireline was constructed down the ridges using pre-existing control lines, and strengthened using limited ignitions. The crews tied the line in with State Route 4 early on the morning of May 7. Crews then ignited along the road beginning on the east side working west to connect the east and west sides and closed off the fire area.

At noon on May 7, stronger winds influenced the fire area and the fire behavior became increasingly erratic and spotting occurred from a southern point into Frijoles Canyon. This forced a decision for park management to order a Type 1 Incident Management Team to assume command of the wildland fire. By mid afternoon, additional spotfires were reported east of the fire on National Forest System lands, and were rapidly increasing in intensity. These spotfires represented a potential threat to the Los Alamos National Laboratory.

A Type 1 Incident Management Team assumed command of the fire in the early morning of May 8. On May 10, the Cerro Grande was a running crown fire that burned into the town of Los Alamos and threatened neighboring White Rock. There were 235 homes destroyed and approximately 18,000 residents were evacuated.